DOCUMENT RESUME

ED 176 875 PS 010 878

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TITLE Pregnant Teenagers' Knowledge of Infant Development.
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SPONS AGENCY Administration for Children, Youth, and Families (DHEW), Washington, D.C.
PUB DATE Mar 79
GRANT 90-C-1341
NOTE 7p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (San Francisco, California, March 15-18, 1979)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adolescents; Cognitive Development; *Expectation; *Infant Behavior; *Knowledge Level; *Pregnancy; Pregnant Students; Social Development; *Teenagers

ABSTRACT

This study investigated pregnant teenagers' knowledge about infant development during the period of their pregnancy. The sample consisted of 98 teenagers between 14 and 19 years old who were pregnant with their first child; all were planning to keep their babies. The group was approximately 50% black and 50% white, 50% middle class and 50% working class in composition. Most of the subjects (70%) still lived with their parents. A prenatal interview was conducted in each subject's home during her last trimester. Three instruments were used. The first required the subject to rank order six areas in which she felt she needed more information: prenatal care, health and nutrition, basic caregiving and safety, perceptual and motor development, social development, and cognitive development. The second instrument used a card sorting technique to measure the subject's expectations regarding the temporal emergence of particular needs and abilities of infants and toddlers. The third instrument consisted of 16 videoclips of a range of appropriate and inappropriate infant activities and mother-infant interactions. The subject was asked to explain what the baby was doing and to say whether she would act the same way as the filmed mother or differently. Additional questions were asked about the subject's own development and future plans. The general finding was that teenagers expect too little, too late with respect to the cognitive and social development of babies. (Author/SS)

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# Pregnant Teenagers' Knowledge of Infant Development[1]

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## Introduction

### Statement of Problem

The statistics are by now a litany familiar to most of you. One million teenagers become pregnant annually in the United States. Over 600,000 give birth and of these, 97% are now choosing to become mothers. How prepared are these adolescents, children themselves, to be parents? The literature is full of research documenting the medical risks to mother and child, and the long-term educational and economic handicaps faced by the teenage parent. Less studied is how prepared the young mother is to handle the role of parenthood itself. That is the focus of our research in the Adolescent Parents and Infants Project at the High/Scope Educational Research Foundation. Specifically, we are finding out how much the teenager knows about infant development while she is still pregnant. These are the results which I will report today. Later, when her baby is six months old, we will be seeing how her expectations regarding infant development in turn affect her actual parenting skills during the complex one-to-one caregiving relationship.

### Overview of Findings

Let me start by giving you our prenatal findings: then I will back up and tell you how we got them. Pregnant teenagers expect too little, too late from newborn babies. We find that needs and abilities, especially those related

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to the cognitive and social growth of infants in the earliest months of life, are greatly underestimated by adolescents. This contrasts with the child abuse and neglect literature which stresses the danger of at-risk parents expecting too much, too soon from their children. As I will discuss later however, early versus late expectations appear to be different rather than contradictory problems.

## Methodology

### Sample

Our sample consists of 98 pregnant teenagers between 14 and 19 years old, with a mean age just over 16½ years. This will be their first child and all are planning to keep their babies. The teenagers are drawn from a five-county area in southeast Michigan and are heterogeneous with respect to sociodemographics. Fifty-seven percent are white; with two exceptions (one Hispanic and one Hawaiian), the rest are black. Half are working class, half middle class, according to parental education and occupation and household density. One-fifth are married or living with the baby's father, but the vast majority (almost 70%) still live with their parents. An additional 8% live with their parents and the baby's father, although many of these are hoping to set up an independent household once the baby is born. The teenagers come from relatively large families in which, on the average, they are one of five children. Strikingly, half come from "broken homes"--families characterized by divorce, separation, or never-married parents. This rate is about 12% higher than comparable national statistics.

Let me stress that our sample is not designed to be representative of the demographic distribution of teenage parents in this country or even in southeast Michigan. Over 85% were located for this study through their participation in a school-age parent program or medical clinic for pregnant adolescents. In fact, this sample may be characterized as a group of pregnant teenagers with a very good chance of "making it," at least educationally and medically. Their access to supportive services is probably greater than that of most prospective teenage parents. Even with this advantage however, their access to child development information appears far from adequate. And any potential problems in the mother-child relationship are compounded by the fact that most of the supportive services they are now receiving are limited to the period of pregnancy and will end soon after the baby is born.

Procedures

In the Prenatal Interview, generally done in the girl's home during her last trimester, three techniques are used to measure knowledge of infant development. In the first, Perceived Information Needed, we ask the teenager to rank order six areas in which she herself feels a need to obtain more information. Although defined in concrete terms in the actual interview (for example, "how to feed your new baby and the kinds of foods your baby will need to grow"), we can label these areas here as: prenatal care, health and nutrition, basic caregiving and safety, perceptual and motor development, social development, and cognitive development.

The second instrument, called the Knowledge Scale, uses a card sorting technique to measure how appropriate teenagers' expectations are regarding infant development during the first two years of life. They are read a total of 73 cards, each describing a particular need or ability of infants and toddlers, and asked to sort each according to the age they think the behavior described would first appear. Sorting is by approximately four-month intervals to acknowledge individual differences in development. Moreover, our scoring procedures are not so much directed towards measuring "correct" answers. Rather we want to assess the direction (early or late) and extent (one or more intervals) that characterize inappropriate expectations.

Our third technique, the Infant Education Interview, makes use of videotape clips to measure how observant the pregnant teenager is of infants' activities and how sensitive she is to the fit between a mother's behavior and her baby's developmental level. Teenagers are shown sixteen videoclips selected to represent a range of appropriate and inappropriate infant activities and mother-infant interactions. After each of the first eight clips, they answer the question: "What is the baby doing and why?" After each of the second eight clips, they respond to: "Would you do the same thing or something different than this mother and why?" Their answers are subsequently rated, by trained and reliable coders, to reflect levels of awareness of infant development and the role of adults in facilitating that development.

The Prenatal Interview also contains many other questions about the adolescent's own development, how she rates her own parents as childrearers, her motivation for having this baby, her use of contraception, future educational and career plans, child care arrangements, and how she thinks her life will change after the baby arrives. Although time does not permit

me to report results in all these areas, I will touch on those which bear significantly on the issue of teenagers' knowledge about infant development. Finally, I do want to emphasize that a major component of our Postnatal Interview will be to videotape the teenage mother interacting with her six-month-old baby during routine caregiving activities at home. These interactions will then be systematically coded using verbal and physical dimensions predictive of infants' cognitive, social and language development.

## Results

To repeat, we found that teenagers expect too little, too late when it comes to the cognitive and social development of babies.

### Knowledge Scale

This finding that teenagers underestimate infants' needs and abilities shows up most clearly in the card sorting measure. When we compare mean scores on correct versus early versus late expectations, we find that the number and extent of late expectations far exceed the other two. On the other hand, early expectation scores (too much, too soon) are the lowest, with appropriate expectations for development in between.

Expecting too little, too late however is not characteristic of teenagers' knowledge in all areas of development. In fact, when we look at their card sorts on items about basic care, health and nutrition, and perceptual and motor development, we discover that their expectations are quite accurate. Apparently, their school or hospital programs are doing a good job of providing them with child development information in these areas. By contrast, when we look at how they view infant needs and abilities in the areas of mental development--cognitive, social and language--it is here that we find teenagers attributing skills to babies many months too late. And, not surprisingly, our analyses show that it is the younger infant--birth to 8 months--who is most likely viewed as a creature of physical needs and growth without corresponding mental activity.

## Infant Education Interview

This view of the infant as a mere eater-eliminator-sleeper is also evident in teenagers' responses to the videotape measure. Mean ratings indicate they can neither observe the signs of learning in babies nor recognize the appropriate activities by which adults support this learning. Infants studying and exploring objects are often described as "doing nothing" or at best "just playing." Nor is this an artifact of verbal fluency--lengthy responses have also been given to describe why babies never do anything. Mothers engaging infants in mutual games are seen as "pushy" or "controlling" while infants' attempts to lure their mothers into games are misinterpreted as signs of hunger or fatigue or just plain "naughtiness." Further, a singular concern with safety may prevent teenagers from simultaneously seeing the developmental appropriateness of many toys--they say "he could choke if he bit off a piece of that nerf ball" or "she might poke her eye out with that stacking post."

## Perceived Information Needed

On the brighter side, when we analyze domains in which teenagers most want additional information, cognitive development is rated highest and significantly more important than all other areas except prenatal care. Teenagers want to know more about how babies think and learn and sort out their world. Moreover, in rating the parenting skills of themselves, their mothers and their fathers, one of the areas in which adolescents hope to do a better job than both of their parents is "helping to develop the child's mind and taking an interest in what the child learns."

## Discussion

What do these findings say about the teenagers' ability to parent her infant? For most adolescent parents, their babies may be unplanned but they are not unwanted. Questioned about their reasons for having and keeping their babies, the girls in our sample most often reply that they want to be needed and loved. Yet, our research shows that teenagers have unrealistic ideas of just how much, beyond food and diapers, their newborn babies will need. And, with inadequate awareness of the exciting developmental changes in the first few months of life, teenage parents will miss many of the satisfactions which their babies are capable of giving them.

I do not think our finding that teenagers expect too little, too late contradicts child abuse research on the dangers of expecting too much, too soon. Early expectations may indeed be an antecedent to physical abuse and neglect in a subpopulation of teenage parents. Rather, I think we have identified late expectations as a different and more widespread problem--one more characteristic of early infancy than later ages and one more concerned with mental development than physical well-being. What we are already beginning to see in our six-month videotapes are babies who are physically well cared for but who are neither played with nor talked to by their teenage mothers. This lack of interaction is not hard to explain given our prenatal findings. After all, adolescent parents might reason, what's the point of playing and talking with babies if they can't understand anything until their second year anyway?

Let me close however, by re-emphasizing that brighter side. Teenagers do want what they don't have--knowledge about how their infants think and learn and begin to make sense out of their complex worlds. Program practitioners take note. Need and motivation mesh well here. Our findings show that adolescent parents are learning lessons about health, nutrition and basic care in their programs. Now they must also learn more about their role in promoting the cognitive and social development of the infants they have chosen to parent.

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This research was funded by the Administration for Children, Youth and Families of the U.S. Department of Health, Education and Welfare (Grant No. 90-C-1341) under the title "Assessing the Child Development Information Needed by Adolescent Parents With Very Young Children."